

ESTIMATED FUTURE SALINITY IN THE ARABIAN GULF, THE MEDITERRANEAN SEA AND THE RED SEA CONSEQUENCES OF BRINE DISCHARGE FROM DESALINATION

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ABSTRACT

Seawater desalination constitutes an important source for water supply to the population bordering the Arabian Gulf, the Mediterranean Sea, and the Red Sea. The three regions represent about 11.8% of the world land area and the countries hosted approximately 9% of the world population in 1950 and 2008 and are projected to do so again in 2050. Population statistics for a 100-year period has been used including a prognosis from 2010 to 2050. Data on desalination plant capacity covering 12 years from 1996 to 2008 has been summarized and a prognosis of the increase in desalination for the three regions until 2050 is presented.